



## **8. ARTIFICIAL INTELLIGENCE (AI) APPLICATION IN LABORATORY ADMINISTRATION AND MANAGEMENT**

**FOR:** Laboratory personnel (Scientists, Technologists, Technicians), Laboratory Managers, Researchers, personnel working in both public and private laboratories.

**OBJECTIVES:** The objective of the workshop is to expose Laboratory personnel to approach of Equipment Ordering, installation, Commission and Management.

### **COURSE CONTENT**

- The Role of NISLT in Laboratory Automation and application of Artificial Intelligence.
- Implementing AI in LIMS for improved data organization, tracking, and reporting
- Using AI for inventory control, including real-time tracking of reagents, supplies, and equipment.
- Employing AI to enhance quality control processes by identifying anomalies and deviations in real-time.
- Utilizing AI to predict equipment failures and schedule preventive maintenance, reducing downtime.
- Optimizing resource allocation through AI algorithms, including personnel and equipment scheduling.
- Implementing AI to streamline sample tracking and automate repetitive laboratory workflows.
- Using AI for data analysis and interpretation, including pattern recognition and anomaly detection.
- Ensuring compliance with regulatory requirements by using AI to track and maintain records.
- Leveraging AI to analyze costs and identify areas for cost reduction and efficiency improvements.
- Enhancing security through AI-based access control systems and surveillance.
- Developing AI-driven tools for generating reports and providing decision support for laboratory managers and administrators

**DURATION:** 7 days

**Date:** 18th – 22nd November 2024

**Arrival:** 17th – 23rd November 2024

**Departure:** 23rd November 2024

**FEE:** ₦80,000.00

**(United Bank for Africa (UBA) ASLTON NISLT BRANCH 1020755954)**

**VENUE:** Ibadan Office, Nigerian Institute of Science Laboratory  
Technology, Educational Zone, Samonda, Ibadan, Oyo State.



**NIGERIAN INSTITUTE OF  
SCIENCE LABORATORY TECHNOLOGY  
IN COLLABORATION WITH  
ASSOCIATION OF SCIENCE LABORATORY  
TECHNOLOGISTS OF NIGERIA NISLT BRANCH  
2024 NISLT SHORT TERM TRAINING WORKSHOP PROGRAMMES**



NISLT 2024 TRAINING